



Product data sheet. Certificates for specialty gases.

Linde HiQ® specialty gases portfolio

Description Specialty gas certificate description:

- Certificate supplied together with the product in hard copy
- Certificates based upon certain standards/certifications (e.g. ISO9001)
- Certificate to be ordered simultaneously with ordering the gas
- Certificate with cylinder number(s) for unique traceability to the gas product
- Shelf life included

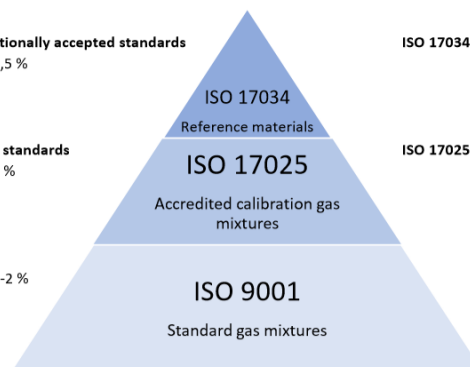
Metrological properties

Analytical verification against internationally accepted standards
Relative measurement uncertainty ≈ 0,5 %

Traceable to internationally accepted standards
Relative measurement uncertainty ≈ 1 %

Traceable to internal Linde standards
Relative measurement uncertainty ≈ 1-2 %

ISO Standards



Certificate types

ISO 17034 Accredited reference material, calibration gas mixture (DAkkS)

ISO 17025 Accredited calibration gas mixture (SWEDAC, DAkkS etc)
examples: NIST, BAM, VSL, NPL etc.

COA Certificate of Analysis
BATCH Batch certificate
COC Certificate of Conformity
UNCERT No certificate
OTHER Customer defined certificate

All necessary information in analytical certificates are stated according to ISO 6141

Features

ISO 17034 - Reference material - Individual samples tested, valid for calibration - Analysis results reported as actual values - Actual concentration and uncertainty specified - Recognized for comparison of results globally - Accredited by national accreditation body	When it is used - Reference material for calibration - Getting results recognized globally - Documentation against authorities
ISO 17025 - Accredited - Individual samples tested, valid for calibration - Analysis results reported as actual values - Actual concentration and uncertainty specified - Accredited by national accreditation body	When it is used - Calibration - Comparison of results from others, using same accreditation of calibration gases - Documentation against authorities
CoA - Certificate of Analysis - Individual samples tested, valid for calibration - Analysis results reported as actual values - Actual concentration and uncertainty specified	When it is used - Calibration - Life Science applications - Critical processes
Batch - Batch certificate - Limited number of samples tested from a batch, not valid for calibration - Results from analysed cylinders applied to the batch - Limited traceability	When it is used - High value applications - Critical industrial processes
CoC - Certificate of Conformity - Showing specification the product is manufactured to, not valid for calibration - No analysis results, but linked to individual samples - Very limited traceability	When it is used - Industrial applications - Standard processes
No cert - No certificate - No analysis, not valid for calibration - Highly limited traceability	When it is used - Low value processes



Linde Northern Europe, www.linde-gas.com

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